

CLAIMS

We claim:

1. A pharmaceutical composition comprising propofol and cysteine.
2. The pharmaceutical composition of Claim 1, further comprising one or more
5 excipients.
3. The pharmaceutical composition of Claim 1, further comprising a GRAS excipient.
4. The pharmaceutical composition of Claim 1, further comprising purified poloxamer,
Ammonium acetate, Benzalkonium chloride, Benzethonium chloride, Benzyl alcohol,
Brij 35, Brij 97, Calcium gluceptate, ChlorobutanOL, Citric Acid, Cremophor EL,
10 Deoxycholate, Diethanolamine, Ethanol, Gamma cyclodextrin, Glycerin, Lactobionic
acid, Lysine, Magnesium chloride, Methylparaben, PEG 1000, PEG 300, PEG 3350,
PEG 400, PEG 600, Poloxamer 188, Poloxamer 237, Poloxamer 338, Poloxmer 407,
Polyoxyethylene 100 stearate, Polyoxyethylene 40 stearate, Polyoxyethylene 50 stearate,
Polysorbate 20, Polysorbate 80, Povidone , Propylene Glycol, Sodium acetate, Vitamin
15 E TPGS, Sodium benzoate, Sodium tartate, vegetable oil, soy bean oil, safflower oil,
cottonseed oil, corn oil, sunflower oil, arachis oil, castor oil, olive oil, an ester of a
medium or long-chain fatty acid, a palmitate, a glycerol ester, polyoxyl hydrogenated
castor oil, ethoxylated ethers, polypropylene-polyethylene block co-polymers,
phosphatides, egg phosphatide, soy phosphatide, glycerin, ascorbic acid, gentisic acid,
20 or monosodium glutamate.
5. The pharmaceutical composition of Claim 1, wherein said composition is:
 - a. an aqueous solution; or
 - b. a non-aqueous solution.
6. The pharmaceutical composition of Claim 1, wherein said cysteine is of sufficient
25 concentration to allow a no more than 10-fold increase in growth of each of
Staphylococcus aureus ATCC 6538, Escherichia coli ATCC 8739, Pseudomonas
aeruginosa ATCC 9027 and Candida albicans ATCC 10231 for at least 24 hours as
measured by a test wherein a washed suspension of each said organism is added to a
separate aliquot of said composition at approximately 50 colony forming units per ml, at

a temperature in the range 20°C to 25°C, whereafter said aliquots are incubated at 20°C to 25°C for 24 hours and thereafter tested for viable counts of said organism.

7. The pharmaceutical composition of Claim 1, wherein said composition is administered:

- 5 a. intravenous;
- b. intramuscular; or
- c. intrathecal.

8. The pharmaceutical composition of Claim 1, wherein the pH of said composition is:

- a. between about 4.5 and about 9;
- 10 b. between about 5 and about 7;
- c. between about 5 and about 6; or
- d. between about 5.5 and about 6.

9. A method of treating a patient by administering the pharmaceutical composition of Claim 1.

15 10. The pharmaceutical composition of Claim 1, further comprising a local anesthetic.

11. A pharmaceutical composition, comprising:

- (a) propofol;
- (b) a water immiscible solvent;
- (c) a surfactant; and
- 20 (d) cysteine or a salt thereof.

12. The pharmaceutical composition of Claim 11, further comprising:

- a. a tonicity modifier;
- b. glycerol; or
- c. a pH modifier.

25 13. The pharmaceutical composition of Claim 11, wherein said propofol is at a concentration of:

- a. about 0.5 to 2.5% w/v;
- b. about 0.5 to 1.5% w/v;
- c. about 0.9 to 1.1% w/v; or

d. about 1% w/v.

14. The pharmaceutical composition of Claim 11, wherein said water immiscible solvent is:

a. selected from the group consisting of:

- 5 i) soybean oil;
 ii) vegetable oil; and
 iii) a medium or long-chain fatty acid; and

b. present at a concentration of:

- i) from about 5 to about 15% w/v;
10 ii) from about 8 to about 12% w/v;
 iii) from about 9 to about 11% w/v; or
 iv) about 10% w/v.

15. The pharmaceutical composition of Claim 11, wherein said surfactant is:

a. selected from the group consisting of:

- 15 i) polypropylene-polyethylene block co-polymers;
 ii) egg phosphatide; and
 iii) soy phosphatide; and

b. present at a concentration of:

- i) from about 0.5 to about 5% w/v;
20 ii) from about 0.5 to about 2% w/v;
 iii) from about 1 to about 1.5% w/v; or
 iv) about 1.2% w/v.

16. The pharmaceutical composition of Claim 11, wherein said cysteine is:

a. cysteine; or a salt thereof; and

25 b. present at a concentration of:

- i) from about 0.5 to about 5% w/v;
 ii) from about 0.5 to about 2% w/v;
 iii) from about 0.9 to about 1.5% w/v; or
 iv) about 1% w/v.

17. A pharmaceutical composition comprising propofol, one or more excipients, and a preservative selected from the list consisting of:

- a. sodium ascorbate;
- b. gentisic acid; and
- c. monosodium glutamate.

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